

What is claimed is:

1. A method of reconciling a current central inventory record having counts and location assignments for a plurality of product types, comprising:
 - obtaining the current central inventory record;
 - recounting a central inventory to produce an updated count for each product type;
 - comparing each count of the current central inventory record to each updated count to obtain a difference in count for each product type;
 - when the difference for a particular product type indicates an excess in the count of the current central inventory record, reducing the count of the current central inventory record for the particular product type by the difference by detecting excessive instances of the count for the product type for a particular location assignment relative to a proportionate amount and removing one or more of the instances from the count for the product type having the particular location assignment; and
 - when the difference for the particular product type indicates a shortage in the count of the current central inventory record, adding the difference to the count of the current central inventory record for the particular product type and providing a location assignment to each instance added to the count by detecting a shortage of instances of the count for the product type for the particular location assignment relative to a proportionate amount and providing the particular location assignment to one or more of the added instances.
2. The method of claim 1, wherein detecting excessive instances of the count for the product type for the particular location assignment relative to a proportionate amount comprises detecting that a number of instances for the particular location is greater than a number of instances for a different location and wherein removing one or more of the instances from the count for the product type having the particular location assignment comprises removing enough instances having the particular location assignment to equalize the number of instances having the particular location assignment with the number of instances having another location assignment.

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3. The method of claim 1, wherein detecting a shortage of instances of the count for the product type for the particular location assignment relative to a proportionate amount comprises detecting that a number of instances for the particular location is less than a number of instances for a different location and wherein providing the particular location assignment to one or more of the added instances comprises providing the particular location assignment to enough of the added instances to equalize the number of instances having the particular location assignment with the number of instances having another location assignment.
4. The method of claim 1, wherein the current central inventory record has counts for each product type divided into a new status, a re-use status, and an in-service status, and wherein the step of recounting a central inventory to produce an updated count for each product type comprises recounting the central inventory to produce an updated count for the new status, the re-use status, and the in-service status, and wherein comparing each count of the current central inventory record to each updated count comprises comparing the count for the new status to the updated count for the new status, comparing the count for the re-use status to the updated count for the re-use status, and comparing the count for the in-service status to the updated count for the in-service status to produce a difference for each status and for each product type.
5. The method of claim 4, wherein comparing each count of the current central inventory record to each updated count further comprises:
 - detecting whether an excess or shortage exists for each status of the current central inventory record for a product type;
 - when an excess exists for the new status for the product type, reducing the count of the new status for the product type by the excess;
 - when a shortage exists for the new status for the product type, converting the shortage of the new status for the product type to a shortage for the in-service status for the product type;
 - when an excess exists for the re-use status for the product type, reducing the count of the reuse status for the product type by the excess;

when a shortage exists for the re-use status for the product type, converting the shortage of the re-use status for the product type to a shortage for the in-service status for the product type;

when an excess exists for the in-service status for the product type, reducing the count for the in-service status for the product type by the excess; and

when a shortage exists for the in-service status for the product type including any shortage converted from the new or re-use status for the product type, adding instances equal to the shortage to the in-service status for the product type with one or more of the instances being provided the particular location assignment.

6. The method of claim 1, wherein the current central inventory record also has pricing and vintaging for the plurality of product types, the method further comprising assigning a price and vintage to the added instances.

7. The method of claim 6, further comprising:

removing from an existing inventory record having counts, pricing, and vintaging for the plurality of product types each instance of each count where price or vintage is an outlier value; and

statistically determining a representative price and vintage for each of the plurality of product types from the existing inventory record after the instances of each count with outlier values have been removed, and wherein assigning a price and vintage comprises assigning the representative price and vintage.

8. The method of claim 6, further comprising removing from each count of the current central inventory record each instance of each count having outlier values for pricing or vintage prior to comparing each count of the current central inventory record to each updated count.

9. The method of claim 6, wherein statistically determining a representative price and vintage comprises computing an average price and vintage from the existing inventory record.

10. The method of claim 1, wherein a first and second product type of the plurality of product types are interchangeable, the method further comprising when there is an excess of the first product type in the current central inventory record relative to the updated count and a shortage of the second product type in the current central inventory record relative to the updated count, substituting the excess of the first product type in place of the shortage of the second product type in the current inventory record.

11. The method of claim 10, further comprising:

referencing a substitution table to determine that the first product type and the second product type are interchangeable.

12. The method of claim 6, wherein assigning the previously determined representative price and vintage for each instance added to the count comprises referencing a price table and a vintage table to determine the representative price and vintage to be assigned.

13. The method of claim 1, further comprising producing a report showing the reductions and additions to the count of the current central inventory record.

14. The method of claim 6, wherein reducing the count of the current central inventory record comprises deleting a number of instances of the count for the product type that have the particular location assignment and have an earliest vintage.

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15. A system for reconciling a current central inventory record having counts and location assignments for a plurality of product types, comprising:
 - a database containing the current central inventory record;
 - a processing device configured to
 - receive an updated count for each product type of an inventory,
 - obtain the current central inventory record from the database,
 - compare the updated count to the count of the current central inventory record to obtain a difference in count for each product type,
 - reduce the count of the current inventory record for a product type by the difference by detecting excessive instances of the count for the product type for a particular location assignment relative to a proportionate amount and removing one or more of the instances from the count for the product type having the particular location assignment when an excess exists in the current inventory record for the product type, and
 - add the difference to the count of the current inventory record for the product type and providing a location assignment to each instance added to the count by detecting a shortage of instances of the count for the product type for the particular location assignment relative to a proportionate amount and providing the particular location assignment to one or more of the added instances when a shortage exists in the current inventory record for the product type.
16. The system of claim 15, wherein the processing device is further configured to detect excessive instances of the count for the product type for the particular location assignment relative to a proportionate amount by detecting that a number of instances for the particular location is greater than a number of instances for a different location and wherein the processing device is further configured to remove one or more of the instances from the count for the product type having the particular location assignment by removing enough instances having the particular location assignment to equalize the number of instances having the particular location assignment with the number of instances having another location assignment.

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17. The system of claim 15, wherein the processing device is configured to detect a shortage of instances of the count for the product type for the particular location assignment relative to a proportionate amount by detecting that a number of instances for the particular location is less than a number of instances for a different location and wherein the processing device is configured to provide the particular location assignment to one or more of the added instances by providing the particular location assignment to enough of the added instances to equalize the number of instances having the particular location assignment with the number of instances having another location assignment.
18. The system of claim 15, wherein the current central inventory record has counts for each product type divided into a new status, a re-use status, and an in-service status, and wherein the updated count of the central inventory includes an updated count for the new status, the re-use status, and the in-service status, and wherein the processing device is configured to compare each count of the current central inventory record to each updated count by comparing the count for the new status to the updated count for the new status, comparing the count for the re-use status to the updated count for the re-use status, and comparing the count for the in-service status to the updated count for the in-service status to produce a difference for each status and for each product type.
19. The system of claim 18, wherein the processor is further configured to compare each count of the current central inventory record to each updated count by:
 - detecting whether an excess or shortage exists for each status of the current central inventory record for a product type;
 - when an excess exists for the new status for the product type, reducing the count of the new status for the product type by the excess;
 - when a shortage exists for the new status for the product type, converting the shortage of the new status for the product type to a shortage for the in-service status for the product type;
 - when an excess exists for the re-use status for the product type, reducing the count of the reuse status for the product type by the excess;

when a shortage exists for the re-use status for the product type, converting the shortage of the re-use status for the product type to a shortage for the in-service status for the product type;

when an excess exists for the in-service status for the product type, reducing the count for the in-service status for the product type by the excess; and

when a shortage exists for the in-service status for the product type including any shortage converted from the new or re-use status for the product type, adding instances equal to the shortage to the in-service status for the product type with one or more of the instances being provided the particular location assignment.

20. The system of claim 15, wherein the central inventory record also has pricing and vintaging for the plurality of product types, the system further comprising:

a storage device containing price and vintage tables, the price and vintage tables containing a representative price and vintage for each of the plurality of product types, wherein the representative price and vintage are statistically predetermined based on inventory records having outlier values for price and vintage removed, and wherein the processor is further configured to assign a price and vintage from the price and vintage tables to each instance added to the count for a product type.

21. The system of claim 20, wherein the representative price and vintage are averages of the price and vintage from the historical inventory record.

22. The system of claim 20, wherein the storage device also contains a substitution table indicating that a first product type of the plurality is interchangeable with a second product type of the plurality, and wherein the processing device is further configured to detect whether an excess of the first product type and a shortage of the second product type exists in the current central inventory record relative to the updated count and substitute the excess of the first product type in place of the shortage of the second product type in the current central inventory record.

23. A system for reconciling a current central inventory record having counts and location assignments for a plurality of product types, comprising:

a database containing the current central inventory record;

a storage device containing price and vintage tables, the price and vintage tables containing a representative price and vintage for each of the plurality of product types, wherein the representative price and vintage are statistically predetermined based on inventory records having outlier values for price and vintage removed, the storage device also containing a substitution table indicating that a first product type of the plurality is interchangeable with a second product type of the plurality; and

a processing device configured to

receive an updated count for each product type of an inventory,

obtain the current central inventory record from the database,

compare the updated count to the count of the current central inventory record to obtain a difference in count for each product type,

detect from the comparison whether an excess of the first product type and a shortage of the second product type exists in the current central inventory record relative to the updated count,

substitute the existing excess of the first product type in place of the existing shortage of the second product type in the current central inventory record to create a new difference for the first and second product types,

reduce the count of the current central inventory record for the first product type by the new difference by detecting excessive instances of the count for the product type for a particular location assignment relative to a proportionate amount and removing one or more instances from the count for the product type having the particular location assignment when an excess exists in the current central inventory record for the first product type, and

add the new difference to the count of the current central inventory record for the second product type along with the representative price and vintage for each instance added to the count and provide a location assignment to each instance added to the count by detecting a shortage of instances of the count for the second product type for the particular location assignment relative to a

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proportionate amount and providing the particular location assignment to one or more of the added instances when a shortage exists in the current central inventory record for the second product type.

24. The system of claim 23, wherein the processing device is further configured to remove from each count of the current central inventory record each instance of each count having outlier values for pricing or vintage prior to comparing each count of the current central inventory record to each updated count.
25. The system of claim 23, wherein the representative price and vintage are averages of the price and vintage from the historical inventory record.
26. The system of claim 23, wherein the processing device is further configured to reduce the count of the current central inventory record for the first product type by deleting a number of instances of the count for the first product type and for the particular location that are equal to the new difference and have an earliest vintage.